SUPPORT FOR THE AMENDMENTS

This Amendment cancels Claims 9 and 11; and amends Claim 8. Support for the amendments is found in the specification and claims as originally filed. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 5-8, 10, 12 and 14 are pending in this application. Claims 5, 7 and 8 are independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

Applicants thank the Examiner for the indication that Claim 14 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Office Action at page 5, section 8. In addition, Applicants thank the Examiner for the indication that Claim 7 is allowed. Office Action at page 5, section 9. However, for the reasons given below, Applicants respectfully submit that all of the pending claims are allowable.

The present invention provides a method for producing a ceramic sheet having a uniform surface quality and a decreased number of defects.

Claims 5-6 and 8-12 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,001,761 ("Hata-761").

The inventions of independent Claims 5 and 8 feature baking a green sheet between spacers that were calcined prior to the baking. Use of the calcined spacers has the advantageous effect of allowing gases that evolve from binder in the green sheet during baking to be easily removed from the green sheet without forming defects.

Hata-761 discloses a method for producing a ceramic sheet in which during calcining a green sheet is interposed between porous sheets or underneath a porous sheet. Hata-761 at column 4, lines 28-48. To prevent defects in the calcined ceramic sheet, Hata-761 requires that the periphery of the green sheet not protrude from the porous sheets. Hata-761 at abstract; column 10, lines 11-42.

The Office Action asserts:

> Hata further discloses the particle has a weight percent of 80 or more (column 7, lines 20-22) where **the sheets average 0 cracks (defects)** in Examples 1-9 in Table 1. Office Action at page 2, section 3, lines 6-8 (emphasis added).

However, the cracks on the ceramic sheet of Hata-761 are generated by a load-applying test, not by baking a green sheet. The recitation "defects" appearing in the present claims are generated when a green sheet is baked to produce a ceramic sheet, not when the ceramic sheet is subjected to a load-applying test. The term "defects" used in the present application (see, e.g., specification at page 10, lines 3-7) is quite different from the term "cracks" used in Hata-761.

Hata-761 is not directed to a method for producing a ceramic sheet having few defects. Hata-761 fails to suggest the limitations of independent Claims 5 and 8 of "producing a ceramic sheet having not more than 5 defects in an area of 900 mm^2 from the first green sheet".

Any *prima facie* case for the obviousness of independent Claims 5 and 8 based on Hata-761 is rebutted by the significant decrease in surface defects that is achieved by the present invention in green sheets calcined between spacers containing spherical ceramic powder (Examples 1-3: all sections had 3 or fewer defects) relative to spacers with ceramic powder of no definite form (Comparative Examples 1-2: some sections had 5 or more defects). See specification at page 33, Table 1 and page 35, Table 2. Hata-761 is silent about

reducing defects in green sheets calcined between or under porous spacers by using spherical particles in the spacers. Thus, any *prima facie* case for the obviousness of independent Claims 5 and 8 based on Hata-761 is rebutted.

Because Hata-761 fails to suggest all the limitations of the claimed invention, and any *prima facie* case of obviousness based on Hata-761 is rebutted, the rejections over Hata-761 should be withdrawn.

Claims 5-6 and 9-10 are rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 5,955,392 ("Takeuchi"). In addition, Claims 11-12 are rejected under 35 U.S.C. § 103(a) over Takeuchi.

Takeuchi discloses a method of producing a ceramic sheet in which a "ceramic green sheet may be laminated with **other *green sheets*** and fired". Takeuchi at column 6, lines 8-9. The method of Takeuchi provides a ceramic sheet having many defects because gases evolved from binder contained in Takeuchi's green sheets cannot easily be removed from the green sheets during the firing.

Takeuchi fails to disclose or suggest firing a green sheet laminated between spacers that were calcined prior to the firing.

Thus, Takeuchi fails to suggest the independent Claim 5 limitations of "sandwiching a first green sheet between spacers; baking the first green sheet while the first green sheet is sandwiched between the spacers; ... , wherein prior to the baking each of the spacers is a calcined sheet". The use of calcined sheets as spacers in accordance with the present invention allows gases evolved from binder contained in the green sheet during baking to easily leave the green sheet without creating defects.

Because Takeuchi fails to suggest all the limitations of independent Claim 5, the rejections over Takeuchi should be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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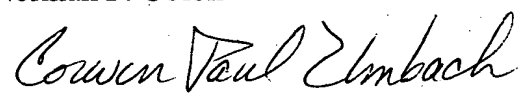

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